

GE Industrial Solutions Metal Enclosed Non-Segregated Bus Duct

Description

Non-segregated phase bus duct is designed for inter-connecting groups of metal-enclosed or metal-clad switchgear, power transformers or other related equipment. The bus duct is designed, manufactured, and tested in accordance with ANSI/IEEE Standard C37.23.

Bar type copper conductors are provided for 600 volt, 5kV, 15kV and 38kV classes. Aluminum conductors are available as an option.

All necessary equipment, connection flanges, wall entrance seals, transformer and/or equipment terminations, tap boxes, elbows, offsets, wall supports, splicing materials, terminal connectors, and structural steel support system included to make a complete installation.

Custom engineered for each application.

Voltage Class	Continuous Current	Momentary Withstand kA Asymmetrical
600V	1200 - 6000 Amps	87 113 133
5 & 15kV	1200 - 6000 Amps	62 78 98
38kV	600 - 3000 Amps	39 49 62



Industry Standards

ANSI/IEEE C37.23
UL/CSA Listed 600V, 5, & 15kV Metal Encl. Bus Syst.
ISO 9001
Seismically/OSHPD Certified

Standard

Aluminum Enclosure with enclosure as ground
600 V bus uses GP0-3 supports
5 and 15 KV bus use polyester supports
38 KV bus uses porcelain supports
Grade 5 Plated Steel Hardware
5-38 KV bus fully insulated with Cycloaliphatic Epoxy

Components/Options

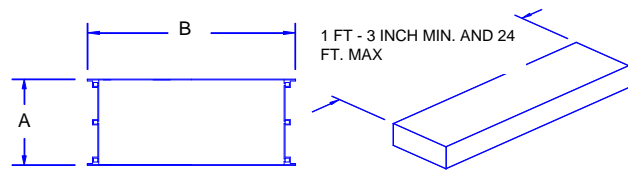
- Steel, Galvanized Steel, and Stainless Steel Enclosure Material Options
- Indoor or Outdoor Rated Enclosures
- Vertical Elbows
- Horizontal Elbows
- Special Elbows
- Transformer Terminations
- Equipment Terminations (Fixed or Flex)
- T-Taps
- Term Boxes
- 600V, Half or Full Neutral
- 1/4" x 2" Copper Internal Ground Bus
- Porcelain or High Alumina Ceramic Insulators
- Stainless Steel or Silicone Bronze Bus Joint Hardware
- Epoxy Insulation for 600V Systems
- Heaters, Heater Monitoring System
- Phase Transpositions
- Expansion Joints (Indoor or Outdoor)
- Wall Entrance Seals
- Fire Stops (1, 2, or 3 Hour)
- Termination Boots
- Trapeze Supports
- Column Supports
- Seismic Bus and Supports
- Option to use in arc res applications

Consult factory for ratings or options not listed to check for availability.

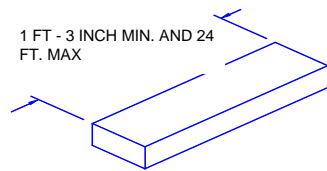
Made in USA



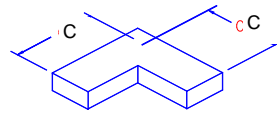
imagination at work



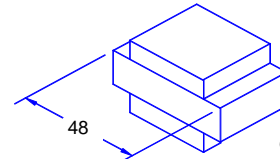
CROSS SECTION



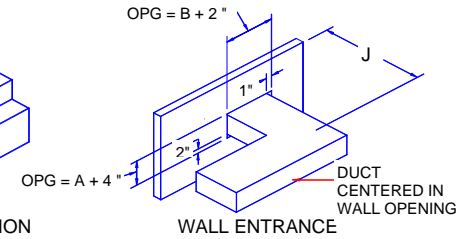
STRAIGHT



HORIZONTAL ELBOW

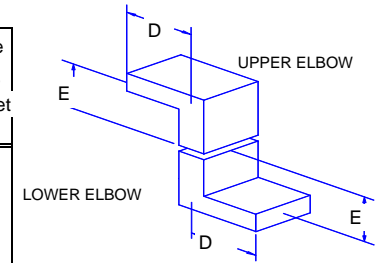


PHASE TRANSPOSITION

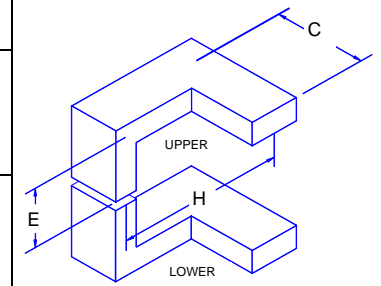


WALL ENTRANCE

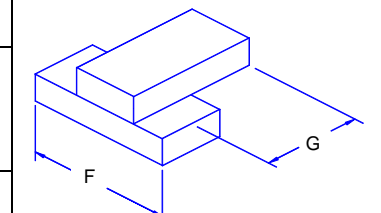
04-May-04														Resistance	Watt Loss	Reactance	Impedance	Capacitance
VOLTAGE & MATERIAL	Ampere Rating	Wt./Ft. Lbs.	DIMENSIONS (INCHES)											Microhms Per Phase Per Foot	Per Three Phase Foot	Microhms Per Foot	Microhms Per Foot	Microfarads Per 1000 Feet
			A	B	C	D	E	F	G	H	I	J						
600	C O P P E R	1200	29	8	21	22	11.38	15	48	22	18.25	28	17	10.76	46	44.29	45.58	0.022
		1600	33	8	21	22	11.38	15	48	22	18.25	28	17	8.50	65	43.46	44.28	0.023
		2000	47	10	21	22	12.38	16	48	22	19.25	30	17	5.79	70	37.05	37.50	0.024
		2500	54	14	21	22	14.38	18	48	22	21.25	34	17	4.71	88	29.23	29.61	0.024
		3200	75	14	27	25	14.38	18	60	25	24.25	34	20	3.91	120	31.84	32.08	0.028
		4000	111	14	36	25	14.38	18	60	25	24.25	34	20	3.47	166	41.93	42.07	0.030
	A L U M	5000	131	24	42	30	14.38	18	60	30	28.75	34	25	2.78	209	42.54	42.63	0.023
		6000	147	28	42	30	19.38	23	60	30	33.75	44	25	2.41	260	24.76	24.88	0.041
		1200	21	8	21	22	11.38	15	48	22	18.25	28	17	13.41	58	43.46	45.48	0.023
		1600	26	10	21	22	12.38	16	48	22	19.25	30	17	8.76	67	37.05	38.07	0.024
		2000	32	14	21	22	14.38	18	48	22	21.25	34	17	6.16	74	28.79	29.44	0.025
		2500	37	14	27	25	14.38	18	60	25	24.25	34	20	5.61	105	31.84	32.33	0.028
5,000 & 15,000	C O P P E R	3200	47	14	27	25	14.38	18	60	25	24.25	34	20	4.10	126	31.11	31.38	0.029
		1200	34	14	27	25	14.38	18	60	25	24.25	34	20	15.09	65	56.50	58.48	0.015
		1600	41	14	27	25	14.38	18	60	25	24.25	34	20	8.50	65	54.37	55.03	0.016
		2000	55	14	30	27	14.38	18	60	27	25.75	34	22	5.79	70	51.20	51.53	0.019
		2500	64	14	36	30	14.38	18	60	30	28.75	34	25	4.71	88	48.76	48.98	0.024
		3000	85	14	36	30	14.38	18	60	30	28.75	34	25	4.03	109	42.88	43.07	0.030
	A L U M	4000	125	14	36	30	14.38	18	60	30	28.75	34	25	3.47	166	41.93	42.07	0.030
		5000	143	24	42	33	19.38	23	60	33	36.75	44	28	2.78	209	42.54	42.63	0.023
		6000	162	28	42	33	21.38	25	60	33	38.75	48	28	2.41	260	24.76	24.88	0.034
		1200	30	14	27	25	14.38	18	60	25	24.25	34	20	13.41	58	54.37	56.00	0.016
		1600	34	14	30	27	14.38	18	60	27	25.75	34	22	8.76	67	51.20	51.95	0.019
		2000	41	14	36	30	14.38	18	60	30	28.75	34	25	6.16	74	48.32	48.71	0.024
38,000	C O P P E R	2500	44	14	30	27	14.38	18	60	27	25.75	34	22	5.68	107	42.52	42.89	0.025
		3000	55	14	36	30	14.38	18	60	30	28.75	34	25	4.32	117	41.93	42.15	0.030
		600	84	24	51	37	24.00	23	84	37	45.88	48	33	15.44	17	76.97	78.50	0.011
		1200	84	24	51	37	24.00	23	84	37	45.88	48	33	15.44	67	76.97	78.50	0.011
		1600	89	24	51	37	24.00	23	84	37	45.88	48	33	10.76	83	68.89	69.73	0.012
		2000	93	24	51	37	24.00	23	84	37	45.88	48	33	8.37	100	62.93	63.48	0.014
	A L U M	2500	111	24	51	37	24.00	23	84	37	45.88	48	33	4.68	88	53.83	54.03	0.017
		3000	120	24	51	37	24.00	23	84	37	45.88	48	33	3.99	108	53.39	53.54	0.017
		600	78	24	51	37	24.00	23	84	37	45.88	48	33	25.46	27	76.97	81.07	0.011
		1200	79	24	51	37	24.00	23	84	37	45.88	48	33	17.23	74	68.89	71.01	0.012
		1600	81	24	51	37	24.00	23	84	37	45.88	48	33	13.41	58	68.06	69.36	0.013
		2000	82	24	51	37	24.00	23	84	37	45.88	48	33	11.33	136	62.28	63.30	0.014



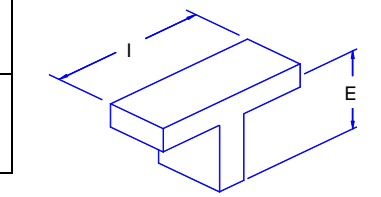
VERTICAL ELBOWS



TRANSITION



HORIZONTAL TEE



VERTICAL TEE

Notes:

1. Ampere ratings are based upon a maximum conductor rise of 65° C in a 40° C ambient in compliance with the temperature limits of ANSI / IEEE C37.23.
2. Resistance, watt loss, and impedance values are calculated using a maximum conductor temperature rise of 65° C and a normal 20° C ambient.
3. Weights and dimensions are for standard 3 phase totally enclosed non-ventilated aluminum enclosures.